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REMARKS

Claims 1-27 are pending in this application. Claims 1, 7, 10-12, 15-17, 23, 26 and 27 are independent claims. All of the claims were rejected. Claims 1, 3, 7, 10-12, 14-17, 19, 23, 26 and 27 are currently amended. Reconsideration is respectfully requested.

Claims 1-6 were rejected under 35 U.S.C. 103(a) as being unpatentable over Floyd in view of Lauer. Claim 1 as currently amended distinguishes the cited combination by reciting "evaluating a control function using the average queue size, the control function defining a drop behavior of packets at the node for a range of average queue sizes as defined by a congestion control process executing at the node to determine the drop probability with regard to the average queue size, the control function having a first segment which defines expected operational range of the average queue size and a second segment which defines overload operation for the average queue size, wherein the first segment has a maximum value which lies outside a queue law function defined for the queue." As described in the specification, the control function may be composed of two linear segments. (Page 10, line 18) The maximum point of the first segment defines the maximum expected values for the average queue size and the corresponding drop rate (q_{max} , p_{max}) when the node is under normal operating conditions. (Page 10, lines 21-24) The second linear segment defines the overload operation range. (Page 10, lines 27-28) If the maximum point of the first segment lies below the equilibrium point and thus inside the queue law function then the transient behavior of the system is unstable, causing the queue size to fluctuate in an oscillatory pattern. (Page 11, lines 7-10) However, if the maximum point of the first segment lies above the equilibrium point and thus outside of the queue law then the transient response of the system decays such that the oscillations dissipate and the system returns to the equilibrium point. (Page 11, lines 16-19)

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The Office previously suggested that the feature described above is disclosed in Floyd at page 406, subsection 3. Applicant respectfully disagrees. In the cited section Floyd teaches that $\max_{th} - \min_{th}$, i.e., the range, should be sufficiently large to avoid global synchronization. The “rule of thumb” example given by Floyd is to set \max_{th} to at least twice \min_{th} . This is a different technique from the presently claimed invention because the value of \max_{th} is set according to \min_{th} rather than the queue function. Further, \max_{th} does not even define an analog of the maximum point of the first segment. As stated at page 400, section IV, the \min_{th} defines a point where packet marking begins and \max_{th} defines a point where marking of every packet begins. The Office has not suggested that Lauer teaches the claimed feature, and it is the opinion of Applicant that Lauer does not teach that feature. Consequently, withdrawal of the rejection of claim 1 and claims 2-6 which depend from claim 1 is requested.

Claims 7-9 were rejected under 35 U.S.C. 102(b) as being anticipated by Floyd. Claim 7 has been amended to recite a distinguishing limitation similar to that discussed above. In particular, claim 7 distinguishes Floyd by reciting “defining a control function for the queue which identifies a drop probability of the congestion control process across a range of average queue sizes, the control function having a first segment which defines expected operational range of the average queue size and a second segment which defines overload operation for the average queue size, wherein the first segment has a maximum value which lies outside the queue law function.” Consequently, withdrawal of the rejection of claim 7 and claims 8-9 which dependent from claim 7 is requested.

The Office made various other claim objections and rejections based on 35 U.S.C. §112. The claims as currently amended are in compliance with the reasoning for those rejections and objections as stated in the Office Action.

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Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Holmes W. Anderson, Applicants' Attorney at 978-264-6664 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

Sept 9, 2004
Date


Holmes W. Anderson, Reg. No. 37,272
Attorney/Agent for Applicant(s)
Steubing McGuinness & Manaras LLP
125 Nagog Park Drive
Acton, MA 01720
(978) 264-6664

Docket No. 2204/A05 120-187
Dd: 09/23/2004